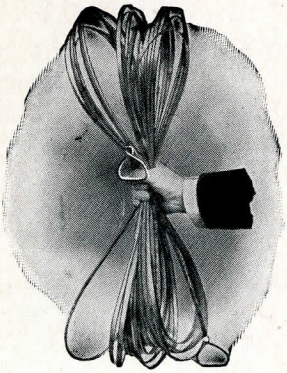
NOTICE

Prices in this catalogue subject to to discount of 20% and 10%

Chicago Steel Tape Co.

With ROD and CHAIN



FOR over 50 years equipment manufactured by the Chicago Steel Tape Co. has played an important part in all that "With Rod and Chain" signifies to engineers, surveyors and field men. The company was founded and is operated for their service.

The experience gained during this time has led to the development of various types of practical field equipment. These improvements, together with refinements of design and construction, have contributed to modern engineering practice and have proven of inestimable value to the thousands of users throughout the country. In addition, the lasting quality of "Chicago" products is a source of satisfaction to the company as well as to the many users.

The maintenance of these standards has established leadership and prestige, and is a guaranty to you of the serviceability and reliability of all "Chicago" products.

The equipment listed in this booklet can be purchased at uniform prices either directly or from any of the leading supply houses in the United States and Canada. It will pay you to ask for "Chicago" equipment.

CHICAGO STEEL TAPE CO.

Manufacturers of

Practical Equipment for Field Use

7956-64 South Chicago Ave.

Chicago 17, Ill., U. S. A.

3-10-53 2-53

HOW THE FIRST STEEL TAPE WAS DEVELOPED

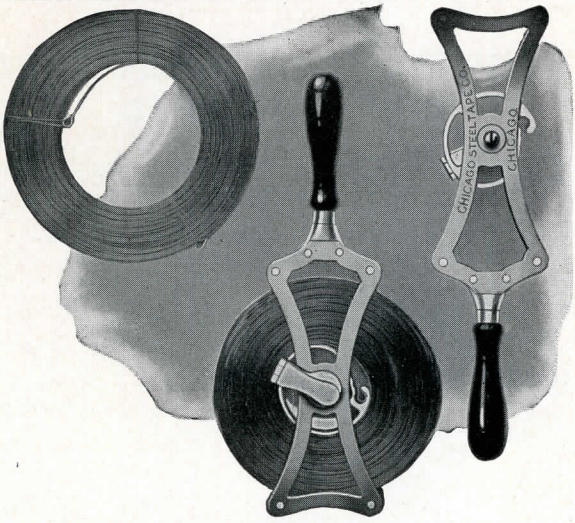
ENGINEERING has little, if anything to do with women's fashions. Yet it was from an article of apparel once in great vogue that there was devised an item of equipment now universally used by engineers. Back in the days of crinoline and hoop skirts, wire manufacturers were called upon to produce a type of wire for making frames that could be flexed but not bent out of shape. The wire that was developed was termed hoopskirt wire, and its flexibility suggested to Daniel M. Wheeler, of Worcester, Mass., a surveyor, the possibility of using it for making measuring tape. He obtained 100 feet of it, and ran solder on it at intervals of one foot, the graduations and numbers being marked on the solder. This tape, which was made in 1870, was the first practical steel tape ever devised, and proved to be far superior to the chain in use at that time.

Working with Mr. Wheeler in the same surveying party was L. A. Nichols, who also made several of the tapes. Mr. Nichols recognized the commercial advantages of tape over chain, and later founded the Chicago Steel Tape Co., devoting the remainder of his life to perfecting steel tape and to developing other equipment of practical use to engineers.

"Chicago" Steel Tape Perfected by Years of Experience

The results of these years of development work are incorporated in the manufacture of "Chicago" Steel Tape, and are responsible for the high degree of quality and service that it gives. Surveyors and field men have come to regard "Chicago" as the highest standard of measuring tape. It has gained a reputation throughout the profession for accuracy, strength, flexibility and compactness. This is due to the fact that it is made of a special steel of great toughness and strength that resists kinking and breaking. Graduations and figures are clearly marked on the babbitt, which is so thoroughly fused with the tape that it cannot chip or peel off. "Chicago" Tape is also preferred because it is easy to handle; it kicks itself out of a kink, and doesn't have to be wiped dry each time after using.

Equipping yourself with "Chicago" Steel Tape is economy. You can depend upon it under all circumstances.



Standard 100-ft. "Chicago" Steel Tape with Metallic Reel

"CHICAGO" STEEL TAPES

Graduation beginning at end of Steel Ribbon	Graduation beginning 5 inches from end of Steel Ribbon	LENGTH	PRICE		
			Without Reel	With Wooden Reel	With Metallic Reel
No. 100	No. 200	50 feet	9.60	13.40	15.85
No. 101	No. 201	100 feet	12.65	16.50	18.90
No. 101½	No. 201½	150 feet	18.05	21.90	25.10
No. 102	No. 202	200 feet	23.40	27.20	33.90
No. 103	No. 203	300 feet	34.20	39.70	44.80
No. 104	No. 204	500 feet	55.75	61.25	64.95
No. 105	No. 205	100 link	10.10	13.95	16.50
No. 106	No. 206	200 link	17.70	21.55	25.10
No. 107	No. 207	20 vara	10.10	13.95	16.50
No. 108	No. 208	40 vara	19.25	23.10	26.40
No. 109	No. 209	50 vara	24.00	29.50	31.45
No. 109A	No. 209A	100 vara	43.90	49.40	56.55
No. 110	No. 210	20 meter	10.10	13.95	16.50
No. 111	No. 211	30 meter	14.60	18.70	20.90
No. 112	No. 212	40 meter	19.25	23.10	26.40
No. 113	No. 213	50 meter	24.00	29.50	31.45
No. 114	No. 214	100 meter	43.90	49.40	56.55

See page 4 for end graduations.

Tapes graduated in feet are marked every foot, with the end feet marked in tenths of a foot; if specified, end feet will be marked in twelfths.

Tapes graduated in links are marked every link; end links in tenths.

Tapes graduated in meters are marked every meter, with end meters in decimeters.

Tapes graduated in varas are marked every vara, with end varas in tenths.

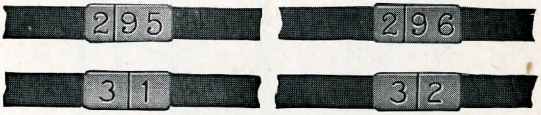
For other lengths, ask for special prices.

Our standard width is 5/16 inch, but ⅛, 3/16, ¼, ⅜ or ½ inch wide tape furnished if specified at the same price as above.

For tapes with shoulders add $1.20 without reel. If a reel is wanted, see page 5.

Tapes marked both sides add 5 cents per mark.

Set of steel numbers for re-stamping tapes, $6.00.



"CHICAGO" MINE TAPES

The insistent demand for a mine tape made of the best steel obtainable is our reason for manufacturing a tape with graduations stamped in brass sleeves securely soldered to the tape. We believe these tapes surpass any other tapes of their kind on account of the quality of material and workmanship used in the construction.

These mine tapes can be furnished in all widths of steel in which the well-known "Chicago" Tapes are made (⅛ inch to ½ inch). When ordering be sure to specify the width desired; ⅛ inch or 3/16 inch are recommended.

Style "X" graduated every foot, link, meter or vara, with end graduations in tenths.

Style "Y" graduated every 5 feet, with end 5 feet every foot, and end feet in tenths.

Style "Z" graduated every 10 feet, with end 10 feet every foot, and end feet in tenths.

	Style "X"	Style "Y"	Style "Z"
100 feet	$23.10	$15.80	$13.85
150 feet	33.25	22.00	20.00
200 feet	43.90	28.25	24.10
300 feet	64.80	40.70	34.55
400 feet	85.80	53.35	45.00
500 feet	106.65	65.90	55.45
100 link	20.90	14.65	12.55
Each additional 100 links	18.50	10.45	8.45
20 meter	14.65		
Each additional 5 meters	3.10	Add $2.25 per 20 meters or 20 varas for small brass sleeves at each half meter or half vara.	
20 vara	14.65		
Each additional 5 varas	3.10		

Tapes furnished with extra graduated foot on first or both ends and with extra steel for hand-hold at no additional charge. Tapes furnished with blank space on ends unless otherwise specified. Tapes can be furnished in any lengths desired; ask for prices on special length or graduations.

If reel is desired, we recommend our "Chicago" Improved Mine Reel listed on page 6. It is the only reel outside of our folding wood reel that will accommodate the narrow widths.

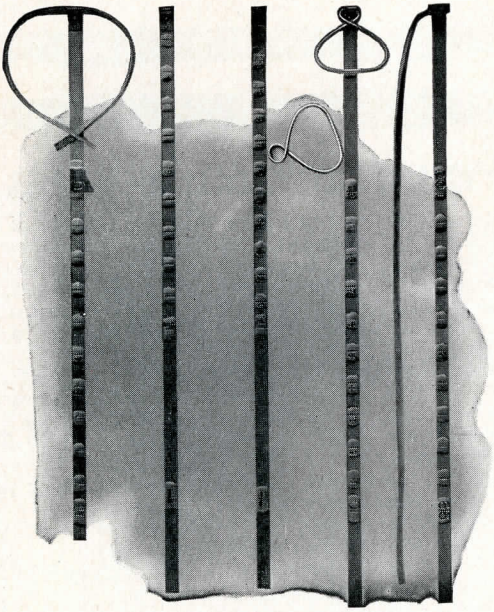
"CHICAGO" STEEL TAPES ARE GUARANTEED

If any tape of our make is not absolutely correct in its graduations or numbering, if it is indistinctly marked, if it breaks due to a flaw in the steel or due to poor workmanship, we insist on replacing it with a new tape and paying transportation both ways.

If otherwise broken, no matter how, **and no parts need replacing,** we will repair and make it entirely serviceable without charge, but we do not pay shipping charges either way. Or, if preferred, we will send a Eureka Repairing Sleeve by mail.

Where part of the tape requires replacement, we charge 50 cents for the repair and 25 cents a foot for steel used. We re-mark and re-number any of our babbitt-marked tapes for $4.60 for a 100-foot tape or shorter—proportionately more for a longer tape. "Chicago" Steel Tape is the only tape guaranteed against breakage. It is well to remember that long and narrow tapes are the most easily broken or kinked, and require more careful handling. They break so seldom, that the maintenance is nothing, compared with big expense of other tapes.

Repairs to tapes other than our own. Remarking Babbitt tapes of other makes $6.25 per 100 ft. Pocket tapes also repaired.

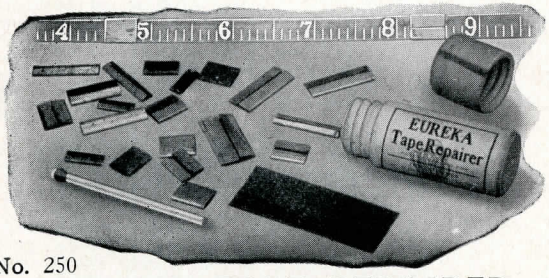


END GRADUATIONS

Reading from left to right: (1) Tape with end 6 inches blank, with shoulders, and with end feet graduated in tenths. (2) Standard tape with graduations to end of loop marked in tenths. (3) Same as 2, except marked in twelfths. (4) Tape with end 6 inches blank and with extra end foot graduated in tenths. (5) 100 ft. end of tape, with 6 inches blank. Rawhide or Metallic handles furnished.

Half Railroad Gauge Mark, 2 feet 4¼ inches from zero put on when specified at no extra charge.

Metal Handles ..... Per Pair $1.10
Rawhide Handles ..... Per Pair .70

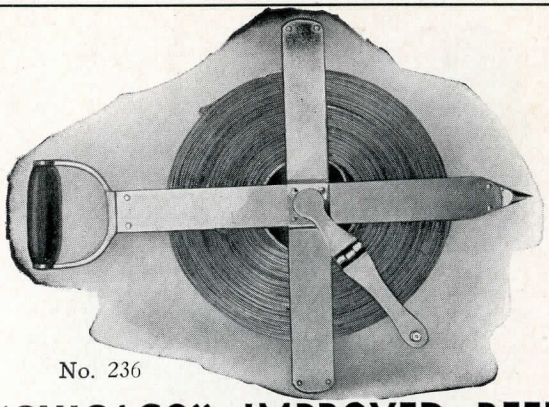


No. 250

EUREKA TAPE REPAIRER

This is the simplest and quickest field convenience for splicing broken tape. A thin sheet-metal sleeve, coated with solder and flux, is fitted over the broken ends of the tape, and hammered down tightly. An ordinary match is then burned underneath, and the weld is securely made if the sleeve and tape are not moved until thoroughly cooled. A neat, smooth job is insured; no rivets or bulky knots.

One dozen splices in box, $1.20; half dozen, 70 cents. When ordering, state width of tape, and whether heavy or light. Sleeves are 1 inch long for heavy field tapes, and ½ inch long for light pocket tapes.



No. 236

"CHICAGO" IMPROVED REEL FOR LONG TAPES

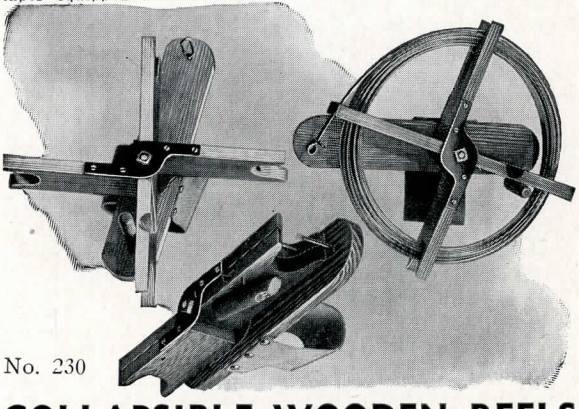
Improved with point at end to keep reel steady while winding, a 6-inch crank giving a 12-inch winding radius and a 1-inch finger knob, this makes the easiest reel on the market for winding up long tapes. Crank when folded locks reel so it cannot unwind. The strong, durable frame is made of steel; the point, crank and handle frames of cast brass, all nickel plated.

Reels for tapes 200 feet long have a 4-inch crank. They do not lock when folded, and do not have a point at end. Reels for tapes 300 and 500 feet long furnished without points, if specified.

Will not take ⅛ inch wide tapes.

Reel for tapes 100 feet long	$ 6.30
Reel for tapes 150 feet long	7.70
Reel for tapes 200 feet long	11.10
Reel for tapes 300 feet long	14.30
Reel for tapes 400 feet long	15.85
Reel for tapes 500 feet long	17.40

Add 25 per cent to above prices for reels to accommodate tapes equipped with shoulders.



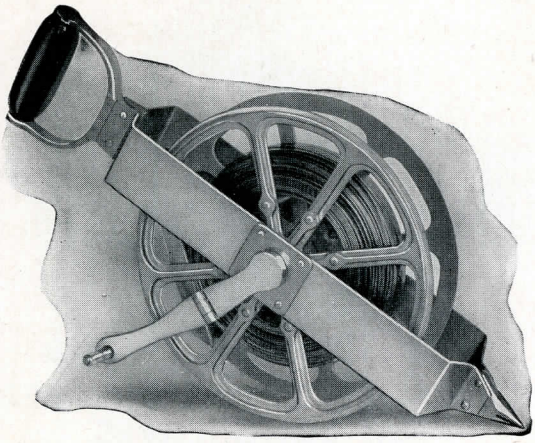
No. 230

COLLAPSIBLE WOODEN REELS

The above illustrations show the "Chicago" Wooden Reel with tape on, open ready for use, and closed so as to permit carrying in a coat pocket.

This hand-polished, hardwood reel will coil a tape much faster than the metallic type. Particularly good for long tapes and shoulder tapes, which it coils loosely on the reel. Strongly made and easily repaired—the ideal reel for hard field usage!

For tapes 200 feet long or under	$3.85
For tapes over 200 feet long	5.50



No. 237

"CHICAGO" IMPROVED MINE REEL

The demand for a serviceable reel to accommodate long narrow tapes has resulted in our developing what we believe to be the easiest working, lightest and most durable reel for long tapes.

This reel has a steel frame 12 inches long by 2 inches wide made of one-sixteenth inch material, with double thickness at crank bearing.

Made of aluminum, the winding reel is 9 inches in diameter by 1⅝ inches wide, and will accommodate up to 500 feet of five-sixteenth inch tape very easily. It will handle the narrower widths, for which it is made, to good advantage, being able to accommodate 1,000 feet of tape ⅛ inch wide.

A flat piece of cold-rolled steel with spring tension presses toward axis of reel, keeping the tape even and tight.

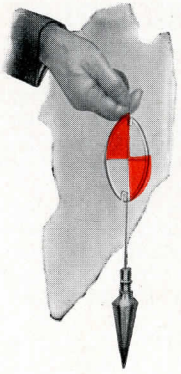
The winding handle is of cast brass 6 inches long, giving a winding radius of 12 inches. When folded, the handle locks the reel so that it cannot unwind.

A 1-inch long finger knob makes a good finger hold for easy winding.

It has a spade handle that is easy to grasp and a point at the bottom for steadying the reel while the tape is being wound.

PRICE $27.00

Your nearest supply house can furnish you with equipment listed in this bulletin — at no advance in prices. Be sure to specify "Chicago" by name.



PLUMB-BOB STRING TARGETS

(Patented)

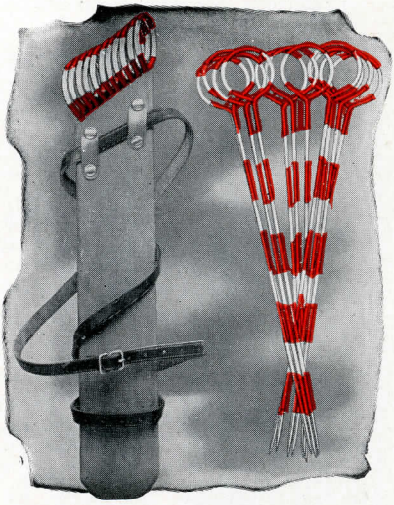
Invaluable for mine and tunnel work. Made of light metal, 4 inches long and 2 inches wide, and weighs about 1 ounce. Attached to string through slots which are in line with division on face of target. If held so that finger touches top of target, rotation is prevented. The weight of the plumb-bob eliminates oscillation. Easily carried in the vest pocket. Price, $1.40 each.

PLUMB-BOBS

6 oz. Brass Plumb-bob, long neck, steel point	$2.25
8 oz. Brass Plumb-bob, long neck, steel point	2.40
10 oz. Brass Plumb-bob, long neck, steel point	2.60
12 oz. Brass Plumb-bob, long neck, steel point	2.80
14 oz. Brass Plumb-bob, long neck, steel point	3.00
16 oz. Brass Plumb-bob, long neck, steel point	3.25

PLUMB BOB SHEATH

6 oz. to 10 oz.	3.75
12 oz. to 16 oz.	4.00



No. 260

MARKING PINS OR ARROWS

Made of hardened-steel 3/16-inch round wire, and 6, 14 or 18 inches long. Japanned red and white, alternating each inch, which aids the eye in quickly spotting them in brush or grass. Quivers are made of the best quality sole leather and are shaped for convenient carrying when strapped around the waist.

We can manufacture Marking Pins to meet Army specification. No. 42.1-5A—price on inquiry.

	Without Quiver	With Leather Quiver
Set of 11 pins 6 inches long	$3.00	$5.25
Set of 11 pins 14 inches long	3.85	8.40
Set of 11 pins 18 inches long	4.20	8.75

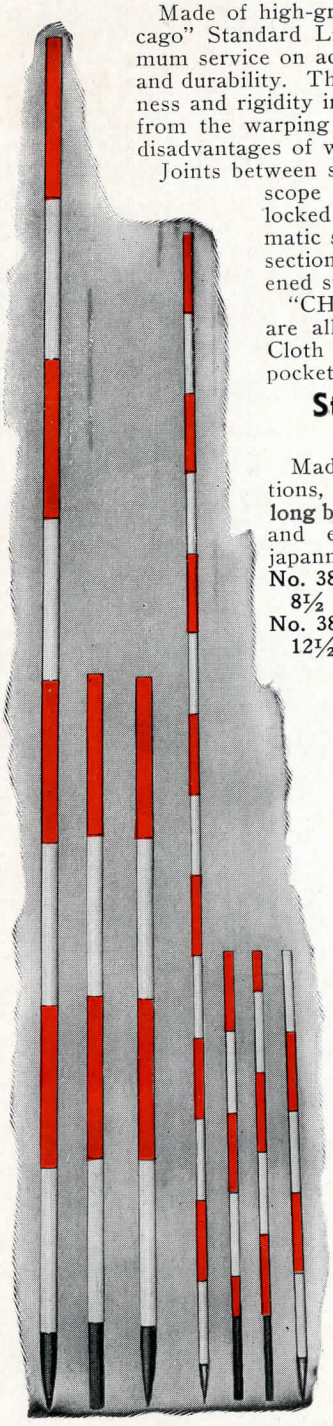
Nickel-plated arrows furnished at same price as above. Plain Pins, 6, 14 or 18 inches, per set, $2.70. Carrying Rings, 70 cents each.

"CHICAGO" LINING POLES

Made of high-grade steel tubing. "Chicago" Standard Lining Poles give maximum service on account of their strength and durability. They retain their straightness and rigidity indefinitely, and are free from the warping and breaking that are disadvantages of wooden poles.

Joints between sections are of the telescope type, and are securely locked by means of an automatic spring catch. The lower section is shod with a hardened steel tip.

"CHICAGO" Lining Poles are all furnished with heavy Cloth bags with individual pockets for each section.



No. 380 No. 385

Standard Lining Poles

Made in two or three sections, each section 4½ feet long by 1⅛ inches in diameter, and each alternate foot is japanned red and white.

No. 380—2 sections—
8½ Ft. $11.45
No. 381—3 sections—
12½ Ft. 17.00

AUTOMOBILE Lining Poles

Same construction as above but sections are 3½ feet long. Length of sections make them convenient to carry in an automobile. Made in two, three or four sections.

No. 382—2 sections—
6½ ft. $9.60

No. 383—3 sections—
9½ ft. 13.75

No. 384—4 sections—
12½ ft. 17.60

Little Lining Poles

Made in three sections, these poles are 7¼ feet long and ⅝ inch in diameter. They weigh only 2 pounds, but are accurate and strong, and cannot be excelled for mining or city work.

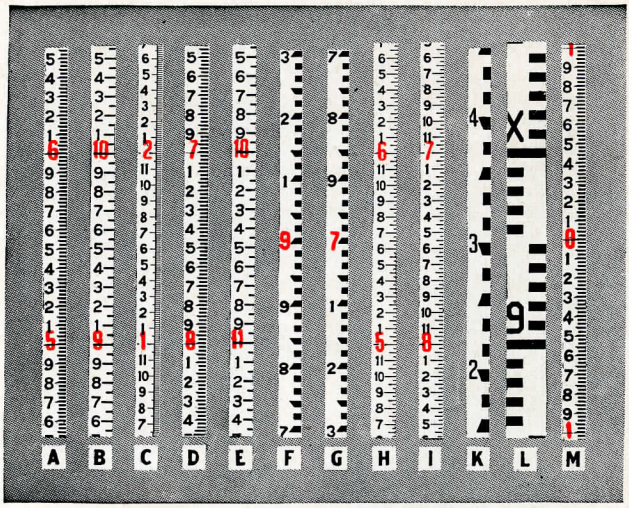
Japanned red and white, alternating every 6 inches. Pack to 33 inches to go with an extension tripod.

No. 385.....$9.75

We can manufacture Army Range Poles to meet specification No. 42.1-37A. Prices on inquiry.

Poles can also be furnished in black and yellow.

Marked in ½ meters, 6 inch stripes, or in links at no extra charge.



ROD AND RIBBON GRADUATIONS

Paper-Cloth Ribbons have become very popular, and will outwear any other rod face on the market. By pasting or tacking them onto an "O.G." batten or similar stick they make excellent temporary leveling rods, water gauges, etc.

Twelve Styles of Graduations

Styles "A," "B," "C," "D," and "E" are made 1½ or 1⅛ inches wide.

Styles "D" and "E" are used on "Chicago" Self-Computing Rods and on "Chicago" Stadia Rods.

Style "M" can be used for various purposes, such as slope staking, and also on "Chicago" Self-Computing Rods.

Style "A"—Feet, 10ths and 100ths, numbering up.
Style "B"—Feet, 10ths and ½ 10ths, numbering up.
Style "C"—Feet, inches and eighths, numbering up.
Style "D"—Feet, 10ths and 100ths, numbering down.
Style "E"—Feet, 10ths and ½ 10ths, numbering down.
Style "F"—Meters, 10ths and 100ths, numbering up.
Style "G"—Meters, 10ths and 100ths, numbering down.
Style "H"—Feet, inches and fourths, numbering up.
Style "I"—Feet, inches and fourths, numbering down.
Style "K"—Links and 10ths, numbering up.
Style "L"—Feet and ½ 10ths, 2½ inches wide.
Style "M"—Any style numbering both ways from a zero.

Prices of All Ribbons Except "L" and "M"

	Paper Cloth	Brass 1½" wide only
8½ feet long or under	$1.90	....
8½ feet to 12½ feet long	2.80	$9.55
12½ feet to 16½ feet long	3.75	11.40
16½ feet to 20½ feet long	4.70	13.25
Each additional 4 feet	.95	1.90
Complete set for Philadelphia Rod	5.70	

Style "L," 12 feet long, $5.70; 16 feet, $7.55; 20 feet, $9.40, not furnished in brass.

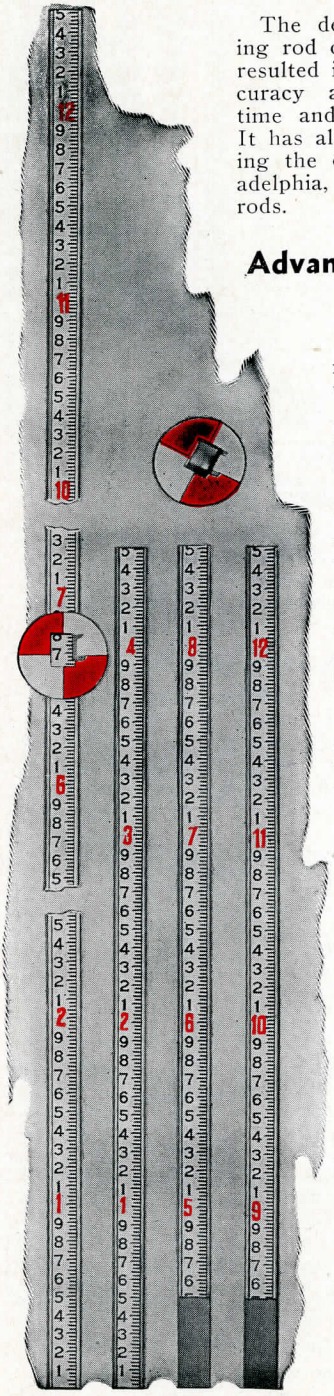
Style "M," add $1.00 per ribbon to above prices.

1½-inch widths are sent unless otherwise ordered.

A reel is furnished with all brass ribbons.

Philadelphia Rod Sets can be furnished in left hand print if specified.

"CHICAGO" LEVELING RODS



No. 300

The development of a leveling rod of the jointed type has resulted in a high degree of accuracy as well as numerous time and labor-saving features. It has also resulted in eliminating the objections to the Philadelphia, New York and Boston rods.

Advantages of Jointed Rods

Following is a summary of the chief advantages of "Chicago" Jointed Leveling Rods, as compared to various types of sliding rods:

(1) The sections of the "Chicago" Rod form a continuous and unbroken face that retains its accuracy under all conditions. There are no clamps that might fail and cause errors.

(2) The face of a jointed rod is broader and the graduations are clearer, making it in fact a self-reading rod.

(3) The face being all on one plane makes it possible to use two targets on a jointed rod—the ideal method for stadia work.

(4) The telescopic joints of the "Chicago" Rod fit perfectly and work smoothly under all conditions. They are not affected by temperature or humidity, factors which often make it difficult, if not impossible, to extend or close a sliding rod.

(5) The telescopic joints make it possible to close the "Chicago" Rod to a short over-all dimension, so that it can be carried with convenience in any automobile or railroad car.

"CHICAGO" LEVELING RODS

From the summary of chief advantages on the preceding page, it is evident that there is every point in favor of the "Chicago" Jointed Leveling Rod, as compared with the sliding type. Only one exception has ever been found, and that is when the reading is above the reach of the rodman the target cannot be moved up or down unless the rod is leaned to one side so that the target can be reached.

This exception really is of little consequence. As a matter of fact, 90% of leveling is done by reading the rod through the telescope, and this cuts out all but 10% of the only objection to a jointed rod. Further, a rodman can reach about 7½ feet, which is equal to 60% of a 12½-foot rod, so that this cuts out 60% of the 10%, leaving but 4% of the operating time when a sliding rod is at an advantage.

Jointed Rod Superior

The remainder of the time—90%—a "Chicago" Leveling Rod is far superior to a sliding rod, and any slight objection is more than offset by the numerous advantages. For example, the face of the "Chicago" rod can be read 50% further than other rods, and this saves a great deal of resetting of the instrument.

Too much emphasis cannot be placed on the accuracy of the "Chicago" Rod. There is no danger, as in the case of a sliding rod, of one section slipping on the other. Stamping the rod on the ground can in no way affect the accuracy.

And when the rod is being carried, the short overall dimensions of the "Chicago" Rod is a great convenience.

In addition, did you ever see a sliding rod 16½ feet long?

Best Materials and Construction

All of the materials and workmanship entering into the construction of "Chicago" Leveling Rods are of the very highest quality, and this accounts for their accuracy and durability.

The 12½-foot rod is made of three pieces and the 16½-foot rod of four pieces of thoroughly seasoned, carefully selected hardwood and these pieces are given a highly polished natural finish. The telescopic joints are made to fit perfectly, and when the sections are assembled there is formed a rod that retains its straightness and rigidity indefinitely. Use of metal for the telescopic joints also insures that the sections can be readily assembled or taken apart, and that the joints are not affected by temperature changes or humidity.

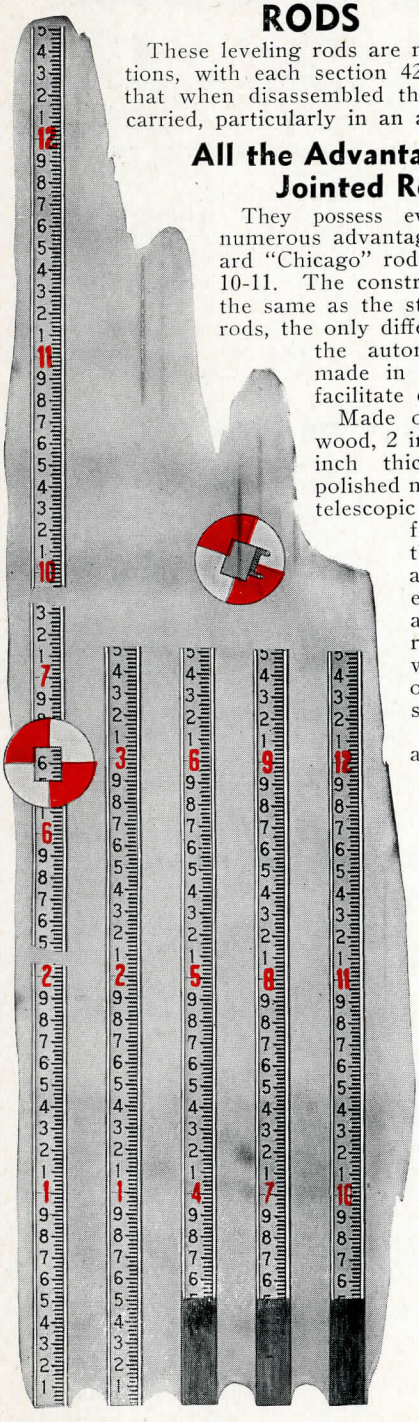
The graduations, which may be any of those shown on page 9 except style "L," are well protected by the beaded face. Unless otherwise specified, style "A" graduations will be furnished.

A heavy cloth bag with pockets is supplied with each rod.

Size	Without Target	With 5-inch Round Target	With Pair of Stadia Targets
12½ ft.	$28.50	$34.20	$41.80
16½ ft.	38.00	43.70	51.30

See Page 19 for Repainting Rods

"CHICAGO" AUTOMOBILE RODS



These leveling rods are made in four sections, with each section 42 inches long, so that when disassembled they can be easily carried, particularly in an automobile.

All the Advantages of a Jointed Rod

They possess every one of the numerous advantages of the standard "Chicago" rods listed on pages 10-11. The construction is exactly the same as the standard 12½-foot rods, the only difference being that the automobile rods are made in four sections to facilitate carrying.

Made of selected hardwood, 2 inches wide and 1 inch thick, with highly polished natural finish. The telescopic joints fit perfectly, and when the sections are assembled together there is formed an accurate and rigid rod which will give years of dependable service.

The beaded face affords protection for the graduations, which can be any of those listed on page 9 except "L." Unless otherwise specified, "A" graduations will be furnished.

"Chicago" Automobile Rods can be equipped with two targets for stadia work, the face being all on one plane and the sections all of the same size.

A heavy cloth bag with four pockets is supplied with each rod.

With Target $43.70
Without Target 38.00

"CHICAGO" STADIA RODS

While the standard "Chicago" Leveling Rods listed on page 11 can be employed for stadia work on account of the distinct graduations and the fact that two targets can be used, still the "Chicago" Stadia Rods described and shown on this page are especially designed for this purpose.

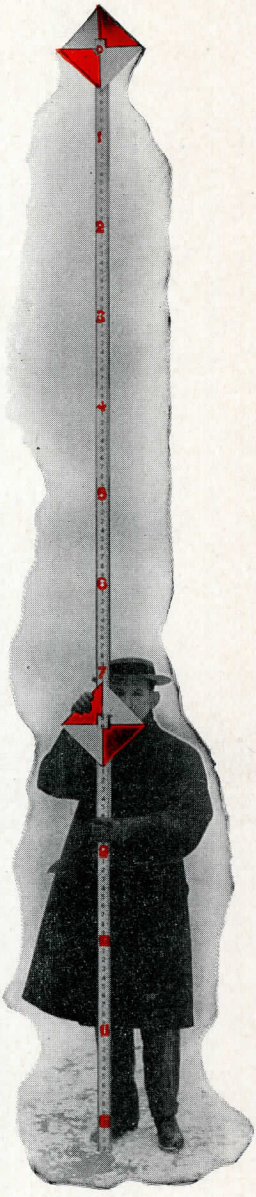
They are provided with graduations numbering down, and by referring to page 9 it will be noted that "D," "E," "G" and "I" graduations can be obtained. Unless otherwise specified, "D" graduations will be furnished.

Save Calculations

By setting the upper stadia hair at zero, near the top of the rod, and by using both targets, calculations in estimating distances can be simplified. Readings of one-thousandth of a foot are equivalent to one-tenth of a foot horizontally, and the broad face and clear graduations made it possible to take accurate readings as far as a half mile away.

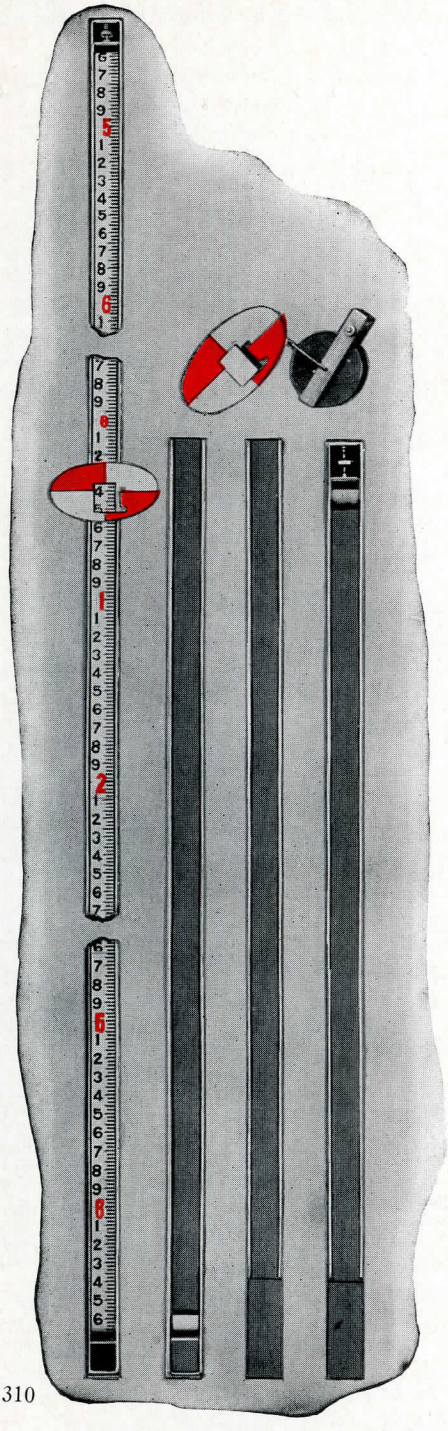
Superior Construction

The materials and workmanship entering into the construction of these rods are of the same quality which characterizes all "Chicago" leveling rods. The 12½-foot rod is made in three sections, with telescopic joints, while the 16½-foot rod is made in four sections. A heavy cloth case is furnished with each rod.



No. 365

12½-foot Stadia Rod, without Targets	$28.50
16½-foot Stadia Rod, without Targets	38.00
One pair Stadia Targets	13.30



No. 310

"Chicago" Self-Computing Leveling Rod with Telescopic Joints

"CHICAGO" SELF-COMPUTING LEVELING RODS

Surveyors and field men who have always wanted a 'short cut" in taking levels, will find that the "Chicago" Self-Computing Rod provides an effective means of saving time and labor, as well as greatly increasing the accuracy of readings.

Simplified Method of Taking Levels

The level is set up and the rod held on the bench. For example, assume the elevation of the bench to be 752.68. On signals from the leveler the rodman runs the graduated ribbon up or down until the line of sight is exactly at the 2.68 mark, at which point the ribbon is clamped to the rod. Then wherever the rod is held, the reading gives the exact elevation of that spot by prefixing the figure 75.

When a turning point becomes necessary, the elevation of it is obtained by simply reading the rod held on it. After resetting the level, it is possible to start away from the turning point in the same manner as from the bench, all that is necessary being to substitute the elevation of the turning point, which has just been obtained, for the elevation of the bench, and reset the ribbon accordingly.

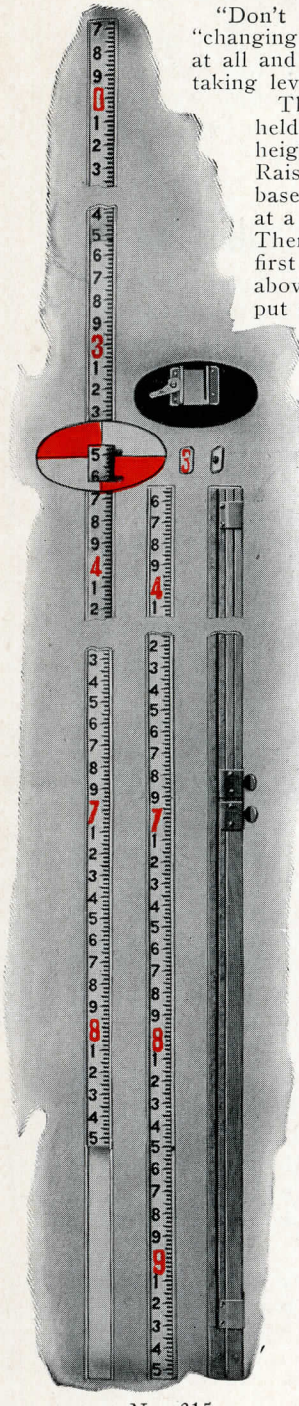
Construction of the Rod

The "Chicago" Self-Computing Rod is made in three sections, 2 inches wide, 1 inch thick, and 4½ feet long, assembled together by means of telescopic metal joints. These sections are made of thoroughly seasoned hardwood, hand polished with a natural finish. The rod is 12½ feet long and has a 12-foot working face. At each end of the rod there are rollers over which passes a metal ribbon. This ribbon is graduated in styles "D" or "E" as specified (see page 9). The ribbon ends are hooked together at the back of the rod, making practically an endless ribbon. This is moved up and down by directions from the instrument man, and clamped down when it gives the desired reading. A reel is provided for the ribbon to be coiled on when not in use.

A 7-inch (long diameter) oval target is furnished with each rod, together with a heavy cloth case.

With target	$49.50
Without target	44.35
Extra ribbons	15.00

"CHICAGO CITY" SELF-COMPUTING LEVELING RODS



No. 315

"Don't be scared by the bugaboo of "changing foot numbers" — it's no bother at all and certainly beats the old way of taking levels!

The level is set up and the rod held on the bench. Assume the height of the bench to be 752.68. Raise the rod on the short sliding base until the line of sight crosses at a .68 mark; then clamp it firmly. Then put the figure "2" in at the first foot mark above, then "1" above that, then "0," "9," etc. Below put the figures "3," "4," and so on. The rod is then fixed, and wherever it is held the reading gives the exact height of that spot by prefixing the figures "75." When a turning point becomes necessary, the elevation is obtained by simply reading the rod. After resetting the instrument, the process of starting away from the turning point is the same as starting from a bench.

Construction

Made in three pieces each 1½ inches wide by 1 inch thick, one face having beaded edges. The three pieces are respectively, 6 feet, 3½ feet, and 2½ feet, long, and slide one on another. Material is seasoned hardwood, hand polished and natural finished. Extended, it has a 10-foot working face and is graduated to feet, tenths and hundredths of feet, tenths and half-tenths, and numbered from the top down. The tenths are black, and the foot numbers, which are in red, snap on or off to permit changing from point to point.

Target is oval-shaped, 7 inches long diameter, and its light weight — less than 5 ounces—in no way weakens it. Slides smoothly up and down; clamps solidly and is furnished with a vernier.

With target $39.75
Without target 34.60
Extra numbers, set of 10 ..... 3.50

ARCHITECTS' AND BUILDERS' LEVELING RODS

This type of rod is designed and manufactured especially for architects, builders and contractors, but is adapted for use by many others who frequently have need for a leveling rod.

It is made of two pieces of selected hardwood, highly polished with a natural finish, and is 1½ inches wide, 1 inch thick and 6 feet long, thus making an 11-foot rod when extended.

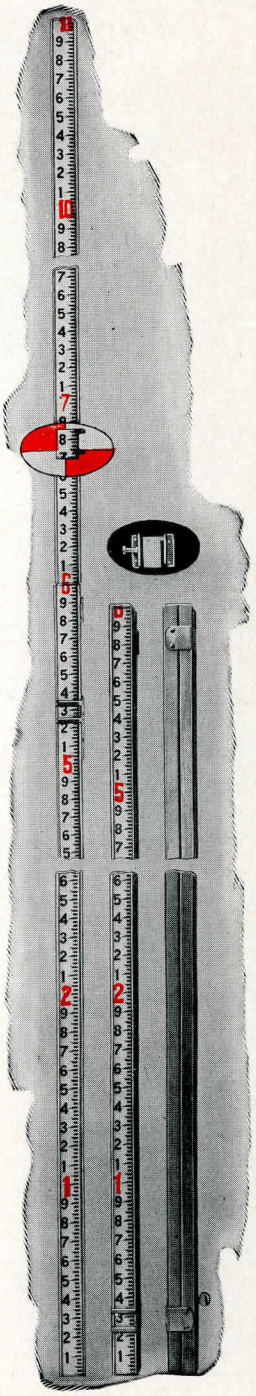
This is the length in which the rod ordinarily is furnished. In some cases, however, a shorter rod will fulfill requirements and be more convenient to handle and carry around; for this purpose a two-section rod of the same type and construction can be supplied in any length up to 11 feet for the same price as the standard 11-foot rod.

The face can be graduated in styles "A," "B," "C," "D" or "E" (see page 9). Unless otherwise specified, style "A" will be furnished.

When specified, the rod will be equipped with an oval target 6 inches wide.

With target $21.00

Without target 15.85



No. 325

"CHICAGO" STADIA TARGETS

These targets are designed for use on "Chicago" stadia rods, but can also be used on "Chicago" leveling rods for stadia work.

The 8-inch round and diamond-shaped targets illustrated at the top are for stadia work, and are furnished in pairs, one without a vernier.

"CHICAGO" LEVELING ROD TARGETS

The 5-inch round target shown at the side is designed for the "Chicago" Leveling Rod.

The 7-inch oval target, pictured at the bottom, is for "Chicago" Leveling and Self-Computing Rods, and has an open back so it can be put on the rod at any point.

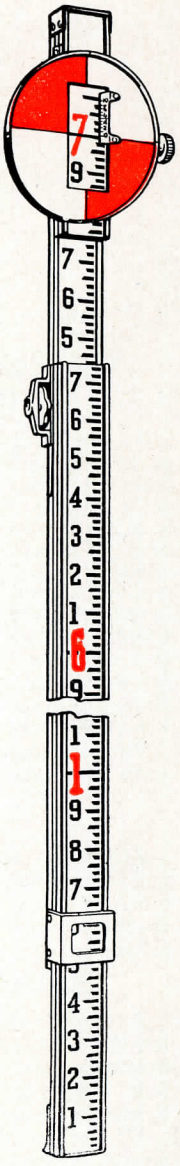
No. 365 8-inch Diamond or Round, per pair..$13.30

No. 360 5-inch Round, each 5.70

No. 361 7-inch Oval, each 5.70

Note: Verniers are furnished for all styles of graduations listed on page 9, except "K" and "L."

PHILADELPHIA LEVELING RODS



In listing a sliding rod we believe we are offering the best rod of its type on the market.

The target screw cannot fall out and holds target firm in any desired position.

Improved sliding clamp takes care of expansion due to dampness without making the rod loose or shaky.

Supplied in tenths and hundredths, and metric graduations.

No. 425, 7 feet long, sliding to 13 feet with target $41.50
Without target 32.00

No. 426, 6½ feet long, sliding to 12 feet with target $38.50
Without target 29.00

No. 428, 5 feet, sliding to 9 feet. With Target..... 41.00
Without Target 31.50

No. 429 Mine Rod. Marked One side only.
3′ sliding to 5′
4′ sliding to 7′
5′ sliding to 9′

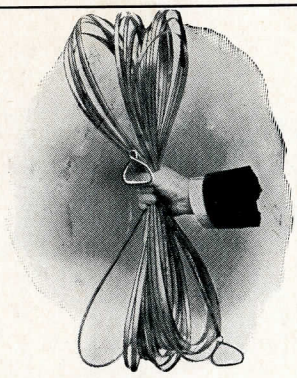
With Target $21.00
Without Target 15.85

Specify length desired.

REPAINTING RODS

Charges for repainting "Chicago" Leveling Rods are $3.75 per section and for Philadelphia Rods are $14.25 per rod; $2.00 additional for targets.

All repair work must be sent in by prepaid express or parcel post, with a letter giving instructions.



Give Complete Description When Ordering

To avoid delay and confusion, orders should be as explicit as possible. While many of the items listed in this booklet are designated by number, there are so many variations of each item that it is advisable to give a complete description of the item so that we can determine exactly what is wanted and ship without delay or error. For example, "Chicago" Tapes are made in practically any length, in six different widths, with or without shoulders, with four different kinds of graduations, and with the graduations beginning at the end of the tape or at some point on it. Similarly, "Chicago" Leveling Rods can be furnished with any of a number of different styles of graduations.

You will save time and expense by specifying exactly the equipment desired.

Credit

Following accepted business practices, it is our policy to send all goods C.O.D. when orders are received from customers who have no established credit rating and who do not send remittances with orders.

Satisfaction Guaranteed

As stated on the introductory page of this booklet, the Chicago Steel Tape Co. was founded and is operated solely to serve engineers, surveyors and field men. Our equipment is sold on the basis that it must give satisfactory service.

If, for any reason, a "Chicago" product be found unsatisfactory or below our standards, it is requested that the article be returned, either for a replacement or for a refund of the purchase price, as desired.

This quarantee has always applied to "Chicago" products.

CHICAGO STEEL TAPE CO.

Manufacturers of
Practical Equipment for Field Use

7956-64 South Chicago Ave.

Chicago, Ill., U. S. A.

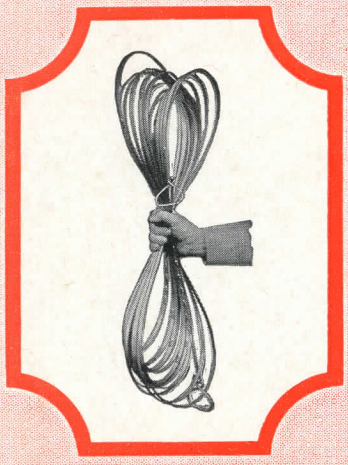
Printed in the U. S. A.—93050

Have You Received YOUR Chainman's Conversion Rule?

If not, you've got something coming to you that you will deeply appreciate. Every man in the field will like this little vest-pocket rule, so small, yet so very convenient and serviceable.

The Chainman's Conversion Rule enables you to instantly convert hundredths to inches, tenths to inches and to sixteenths of inches without going through the fuss of pencil-and-paper calculating.

It's yours for the asking—just enclose ten cents to cover the mailing—we'll be glad to send it at once.



"CHICAGO"

PRACTICAL EQUIPMENT FOR FIELD USE

Tapes and Reels

Tape Repair Sleeves

Marking Pins

Plumb Bobs and Targets

Telescopic Lining Poles

Self-Computing Leveling Rods

Telescopic Leveling Rods

Leveling Rod Targets and Graduated Ribbons

CHICAGO STEEL TAPE CO.

7956-64 So. Chicago Ave.

CHICAGO, ILL. U.S.A.